Patent Claims:

1-16 (canceled)

17. (new) A method for detecting electronic calls, comprising:

sending a call request from a calling terminal device by way of a signaling unit to a called terminal device;

enabling a data transmission between the terminal devices;

transmitting user data between the calling terminal device and the called terminal device;

noting an identifier by the signaling unit for the calling terminal device;

storing the identifier in a memory unit; and

initiating the storage of the identifier or outputting the identifier on an output unit,

wherein the called terminal device is a terminal device in a data packet transmission network, and the signaling unit performs signaling in accordance with a signaling protocol which has been defined for data transmission in a data packet transmission network.

18. (new) The method according to Claim 17, wherein a detection request is sent to the signaling unit from the called terminal device during the data transmission or in conjunction with the signaling relating to the data transmission and the signaling unit notes the identifier on the basis of the detection request and that the detection request is transmitted with a message and/or an information element which has been defined for the signaling in the data packet transmission network.

19. (new) The method according to Claim 17, wherein an identifier is stored for the called terminal device, and upon arrival of the call request, a check is performed by the signaling unit as to whether the identifier of the terminal device to be called has been stored and that the identifier of the calling terminal device is noted when the identifier of the terminal device to be called has been stored.

20. (new) The method according to Claim 17, wherein the identifier of the calling terminal device is conveyed to the signaling unit in conjunction with the call request.

21. (new) The method according to Claim 17, wherein the calling terminal device is a terminal device in a circuit-switched data transmission network.

22. (new) The method according to Claim 17, wherein the identifier of the calling terminal device is requested as a result of the detection request by the signaling unit by way of a network transition unit to the circuit-switched data transmission network with the aid of an identifier request.

23. (new) The method according to Claim 17, wherein in order to process the identifier request in the circuit-switched data transmission network a ITU-T standard Q.731 method is used.

24. (new) The method according to Claim 17, wherein the identifier request is transmitted in accordance with at least one of the standards Q.1902.1 to Q.1902.6 and/or according to SIP-T.

25. (new) The method according to Claim 17, wherein the calling terminal device is a terminal device in a data packet transmission network and that the signaling unit or another signaling unit checks the access authorization of the calling terminal device for the data packet transmission network.

26. (new) The method according to Claim 17, wherein the signaling protocol is the SIP protocol or the ITU-T H.225 protocol or another signaling protocol that is suitable for signaling between the terminal device and the signaling unit.

27. (new) The method according to Claim 17, wherein the detection request is transmitted in an INFO message using the INFO method according to RFC 2976, and that a header section of the INFO message or a body section of the INFO message contains an information element which serves to uniquely identify the detection request.

28. (new) The method according to Claim 17, wherein the detection request is transmitted in a message using a method in accordance with an RFC defined for the detection

of calls or according to an extended H.225 protocol or according to another signaling protocol between the terminal device and the signaling unit.

29. (new) The method according to Claim 28, wherein the message contains no additional information elements for identifying the detection request.

30. (new) The method according to Claim 28, wherein the message contains in its header or in its body an information element which uniquely identifies the detection request.

31. (new) The method according to Claim 17, wherein in addition to the identifier of the calling terminal device the identifier of the called terminal device is noted.

32. (new) The method according to Claim 17, wherein in the case of a call diversion the identifiers of all terminal devices involved in the call diversion are noted.

33. (new) The method according to Claim 17, wherein the date is noted.

34. (new) The method according to Claim 17, wherein the time is noted.

35. (new) The method according to Claim 17, wherein at least one identifier for the signaling units involved in the call processing is noted.

36. (new) The method according to Claim 17, wherein the identifiers that are relevant to the transmission of the user data by way of the data packet transmission network are stored.

37. (new) A terminal device for detecting electronic calls, comprising:

a connection unit for connecting the terminal device to a data packet transmission network; and

a control unit containing a function that generates a detection request automatically at the instigation of a person operating the terminal device, and when this request is processed the signaling unit notes an identifier of a terminal device calling the terminal device and the control unit sends requests to a signaling unit.

38. (new) The terminal device according to Claim 37, wherein the terminal device contains at least one further unit or function, during whose operation a method step relating to the called terminal device is performed, comprising:

sending a call request from a calling terminal device by way of a signaling unit to a called terminal device;

enabling a data transmission between the terminal devices;

transmitting user data is transmitted between the calling terminal device and the called terminal device;

noting an identifier by the signaling unit for the calling terminal device;

storing the identifier noted by the signaling unit in a memory unit; and

initiating the storage of the identifier or outputs the identifier on an output unit,

wherein the called terminal device is a terminal device in a data packet transmission network, and that the signaling unit performs signaling in accordance with a signaling protocol which has been defined for data transmission in a data packet transmission network.

39. (new) A signaling unit for detecting electronic calls, comprising:

a control unit that signals and provides a function that automatically notes an identifier of a terminal device calling the called terminal device; and

a signaling protocol that has been defined for a data transmission in a data packet transmission network.

40. (new) The signaling unit according to Claim 39, wherein the control unit carries out signaling in accordance with the signaling protocol.

41. (new) The signaling unit according to Claim 39, wherein the signaling unit contains at least one further unit or function, during whose operation a method step relating to the signaling unit is performed, comprising:

sending a call request from a calling terminal device by way of a signaling unit to a called terminal device;

enabling a data transmission between the terminal devices;

transmitting user data is transmitted between the calling terminal device and the called terminal device;

noting an identifier by the signaling unit for the calling terminal device;

storing the identifier noted by the signaling unit in a memory unit; and

initiating the storage of the identifier or outputs the identifier on an output unit,

wherein the called terminal device is a terminal device in a data packet transmission network, and that the signaling unit performs signaling in accordance with a signaling protocol which has been defined for data transmission in a data packet transmission network.